



STATE OF MARYLAND

DHMH

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May 7, 2007

Public Health & Emergency Preparedness Bulletin: # 2007:17
Reporting for the week ending 04/28/07 (MMWR Week #17)

Current Threat Levels:

National: Yellow (ELEVATED) *The threat level in the airline sector is Orange (HIGH)
Maryland: Yellow (ELEVATED)

REVIEW OF DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	<u>Aseptic</u>*	<u>Meningococcal</u>*	*(non-suspect cases)
New cases:	* Data not yet released from Division of Communicable Disease Surveillance		
Prior week:	* Data not yet released from Division of Communicable Disease Surveillance		
Week#17, 2006:	1	-	

5 outbreaks were reported to DHMH during MMWR Week 17 (Apr. 22- Apr. 28, 2007):

4 Gastroenteritis outbreaks

3 outbreaks of GASTROENTERITIS associated with Nursing Homes
1 outbreak of GASTROENTERITIS associated with a Daycare

1 Rash illness outbreak

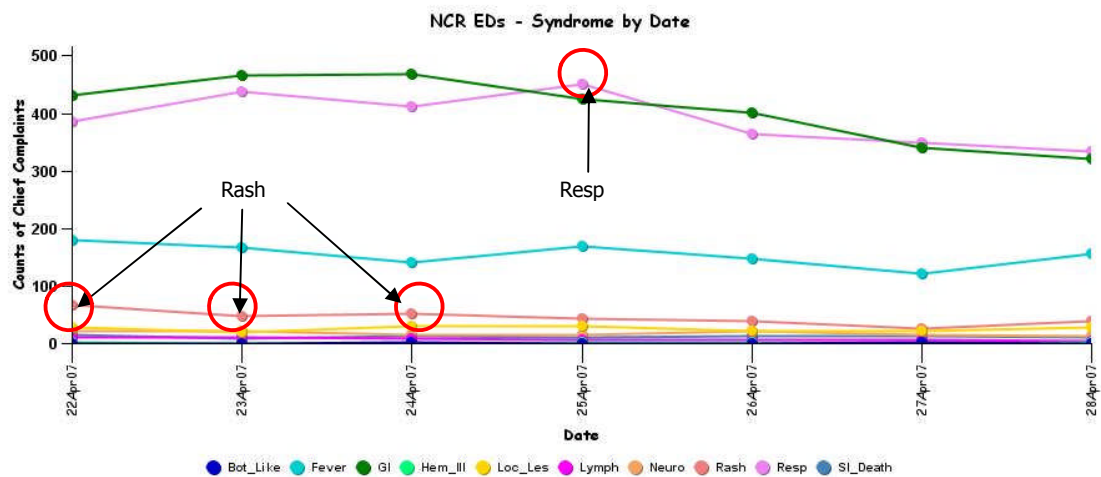
1 outbreak of SCABIES associated with a School

SYNDROMIC SURVEILLANCE REPORTS:

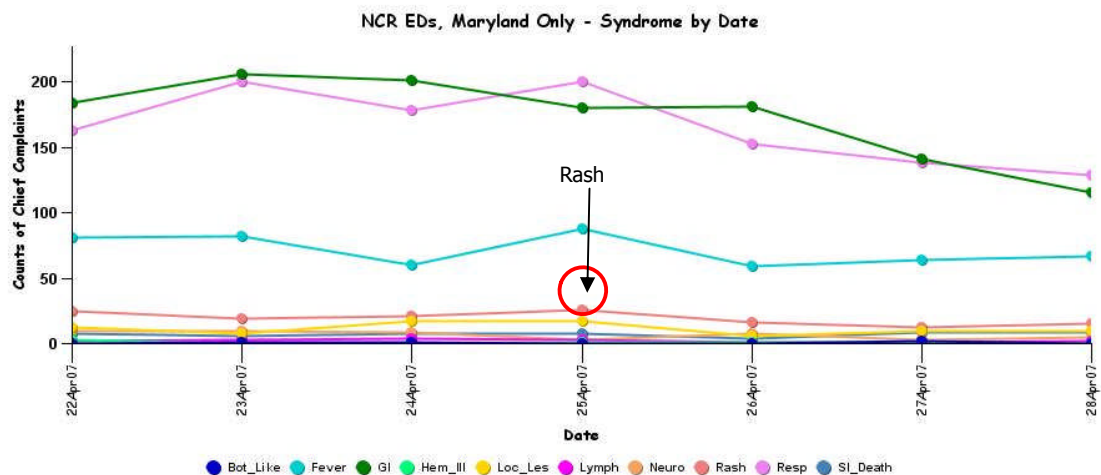
ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):

Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts only.

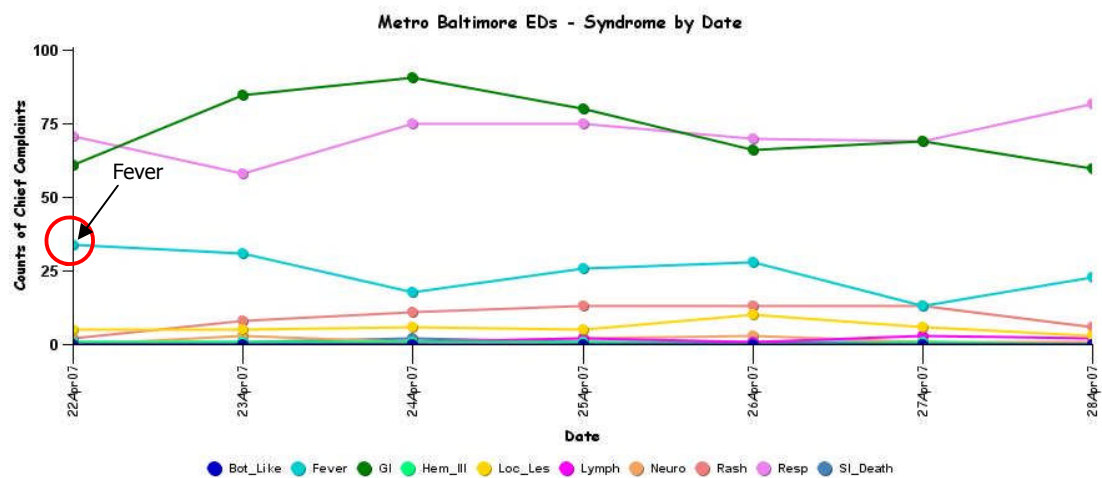
Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness. * Note: ESSENCE – ANCR Spring 2006 (v 1.3) now uses syndrome categories consistent with CDC definitions.



* Includes EDs in all jurisdictions in the NCR (MD, VA, DC) under surveillance in the ESSENCE system



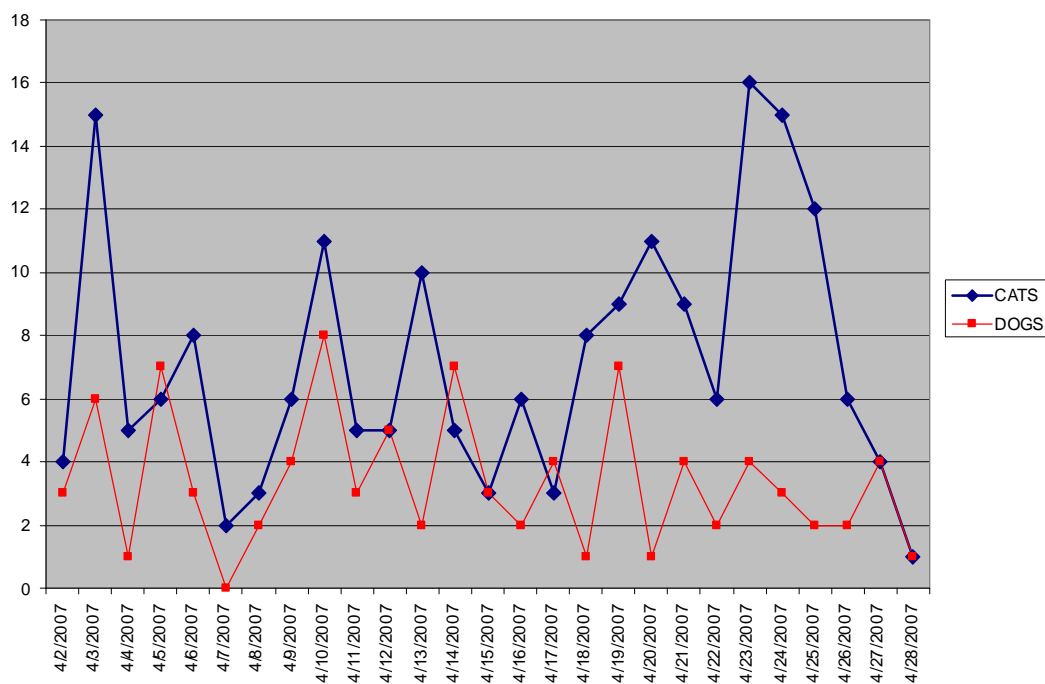
* Includes only Maryland EDs in the NCR (Prince George's and Montgomery Counties) under surveillance in the ESSENCE system



* Includes EDs in the Metro Baltimore region (Baltimore City and Baltimore County) under surveillance in the ESSENCE system.

Baltimore City Syndromic Surveillance Project: No suspicious patterns in the medic calls, ED Syndromic Surveillance and the animal carcass surveillance. Graphical representation is provided for animal carcass surveillance 311 data.

Dead Animal Pick-Up Calls to 311

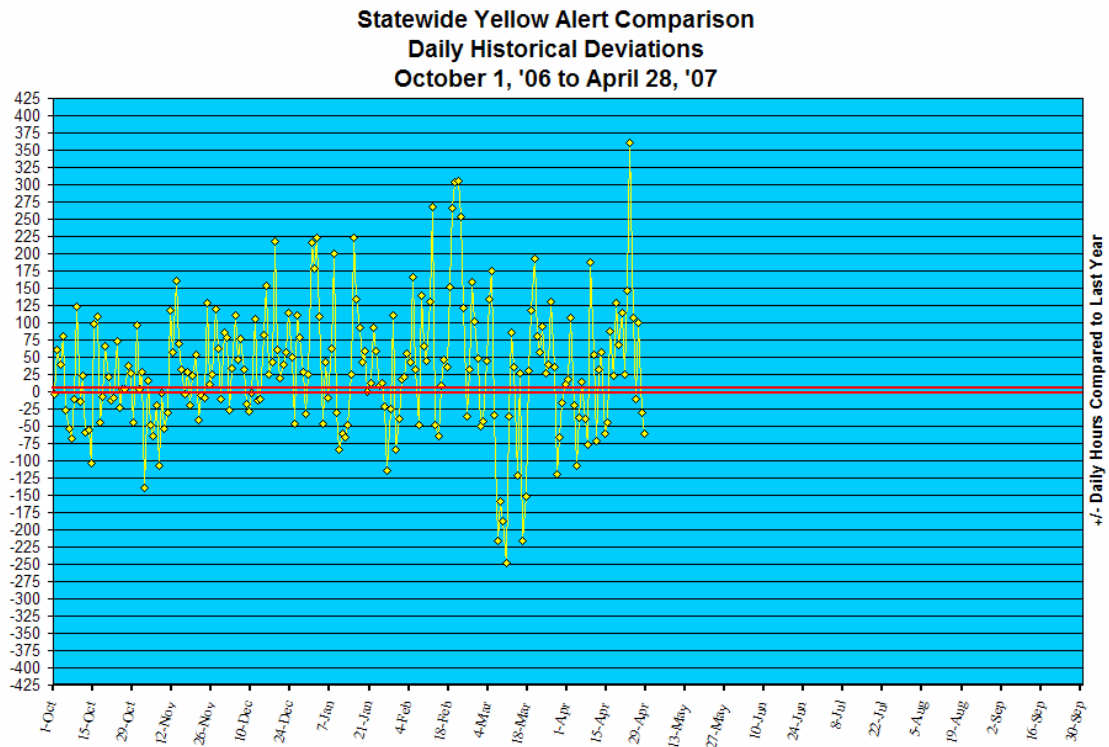


REVIEW OF MORTALITY REPORTS:

OCME: OCME reports no suspicious deaths related to BT for the week

REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/06.



NATIONAL DISEASE REPORTS:

E. COLI O157, GROUND BEEF (USA- Multi State): 24 Apr 2007, California state health officials on Fri 20 Apr 2007, announced a recall in 5 states of frozen ground beef patties after at least 3 Napa County children who ate at Little League baseball snack shacks were sickened by E. coli. The recall was issued for about 100 000 pounds of frozen patties produced by Merced-based Richwood Meat Co. Inc. from April to May 2006, and distributed in California, Arizona, Idaho, Oregon, and Washington. The children all fell ill after eating hamburgers at the St. Helena and Calistoga Little League fields, and have since recovered, said Karen Smith, Napa County's public health officer. Those cases were reported on 3-4 Apr 2007 and 2 other possible cases are being investigated, she said. The products being recalled are hamburger patties and ground beef sold under the brands Fireriver, Chef's Pride, Ritz Food, Blackwood Farms, California Pacific Associates, C&C Distributing, Golbon, and Richwood. Consumers should look for the number "11806" on the label, meaning it was produced on the 118th day of the year 2006. "Consumers should check their freezers for these products and destroy them or take them back to place of purchase to ensure they do not become ill," said Dr. Mark Horton, state public health officer. (Food safety threats are listed in Category B on the CDC list of Critical Biological Agents)* Non-suspect case

LISTERIOSIS, UNPASTEURIZED CHEESE (Indiana): 25 Apr 2007, Serious health concerns are emerging from recent door-to-door sales in Indianapolis, from which at least one person has become seriously ill. Someone is selling unpasteurized cheese on the city's west side. The Marion County Health Department said it was made aware of the bad, white cheese on Tue 24 Apr 2007. Officials are worried that others might buy the product. The cheese was contaminated with a bacteria called Listeria. Listeria monocytogenes has been associated with such foods as raw milk, pasteurized fluid milk, cheeses (particularly soft-ripened varieties), ice cream, raw vegetables, fermented raw-meat sausages, cold cuts, raw and cooked poultry, raw meats (all types), and raw and smoked fish. Its ability to grow at temperatures as low as 3°C permits multiplication in refrigerated foods. Experts said that it takes at least 3 weeks before someone who eats something contaminated with Listeria to notice symptoms. "If something tastes bad, if it's spoiled, we tend not to eat it. We avoid it," said Dr. Crystal Jones, medical director of acute diseases for the Marion County Health Department. "Listeria

can be in something that tastes perfectly good. We just don't know it, and if we're in one of those at-risk populations, it can become a very serious thing." (Food safety threats are listed in Category B on the CDC list of Critical Biological Agents)* Non-suspect case

E. COLI O157, STEAK (Pennsylvania): 26 Apr 2007, The Pennsylvania Department of Health is investigating 5 cases of E. coli O157 reported in 4 counties that are believed to be linked to eating rare or medium-rare steak at different Hoss's Steak and Sea House restaurants. Four of the 5 cases were hospitalized; none developed kidney failure. "The Department of Health is working very closely with the Pennsylvania Department of Agriculture and the United States Department of Agriculture to provide any information that can help in identifying the source of the E. coli cases," state Health Secretary Dr. Calvin B. Johnson said. "We will continue to work with our partners to identify cases in Pennsylvania and, we hope, prevent any additional illnesses." The ill persons ate at 4 different Hoss's restaurants between 24-29 Mar 2007, in Centre, Dauphin, Venango and York counties. The restaurant exposures are the only common link among the individuals and suggest that the source of the infections is an item consumed at the restaurants. All confirmed cases ate different cuts of steak; several reported the item was requested and consumed rare or medium-rare. Because the number of cases is small and the exposure period was several weeks ago, the health department believes the risk to Hoss's customers is low. However, customers who may have taken home leftover steak should discard it. The USDA has issued a recall of steak products from H-F-X Inc., which is Hoss's processing and distribution center in South Claysburg, Pennsylvania. The company is fully cooperating with federal and state authorities in the recall and illness investigation. (Food safety threats are listed in Category B on the CDC list of Critical Biological Agents)* Non-suspect case

ANTHRAX, BOVINE (South Dakota): 26 Apr 2007, An anthrax case was diagnosed in a cow herd in northeast South Dakota on Tuesday 24 Apr 2007. The case is in a herd that experienced anthrax losses in 2005, and the producer has lost 2 out of a group of 50 this spring. State Veterinarian Sam Holland says anthrax spores survive indefinitely in contaminated soil, and much of South Dakota has the potential for an outbreak. Drought, floods and high winds can expose anthrax spores to grazing livestock. The disease can kill animals rapidly, and contact with the carcasses can spread anthrax to humans. Holland says that's why it's important to quickly quarantine infected herds and properly dispose of carcasses by burning or burying them. (Anthrax is listed in Category A on the CDC list of Critical Biological Agents)* Non-suspect case

EASTERN EQUINE ENCEPHALITIS, EQUINE (Florida): 27 Apr 2007, A Dunnellon horse is infected with the potentially deadly eastern equine encephalitis (EEE) virus, making it the 1st infected animal reported in Marion County for the year (2007), county Health Department officials said Monday 23 Apr 2007. The diseased horse is still alive, said Tom Moore, Marion County Health Department environmental administrator, and so far it is the 4th case of the mosquito-spread disease this year in Florida. "This being a tropical climate, Florida is an active environment," Moore said. "But there has not been one development in humans." In 2006, there were 3 cases of horse infections in Marion County and 14 cases the year before. According to Florida Department of Health officials, there has not been a human case of EEE infection in Marion County since 1992, which is as far back as the agency's computer records extend. But humans occasionally are infected with the virus or by the similar West Nile Virus (WNV), which is also spread by mosquitoes. As for EEE, there were 65 human cases reported in Florida between 1964 and 2005, according to the Centers for Disease Control and Prevention. The mortality rate for people infected by the virus is high. About 30 percent of people who contract the disease die, making it one of the most serious mosquito-borne diseases in the United States. Many people infected with the EEE virus show no symptoms. For those who do show symptoms, they range from mild flu-like illness to inflammation of the brain, coma and death, according to the CDC. There is no vaccine available to protect humans from infection, but there is one for horses. (Viral encephalitis is listed in Category B on the CDC list of Critical Biological Agents)* Non-suspect case

PLAGUE, SQUIRREL (Colorado): 27 Apr 2007, State health officials Thursday confirmed that plague has been found in a dead tree squirrel in the vicinity of City Park. A citizen had noticed a die-off of squirrels in the neighborhood and reported it to Denver Animal Control. A carcass was collected Wednesday and tested at the Colorado Department of Public Health and Environment laboratory where preliminary tests were positive for plague. John Pape, an epidemiologist who specializes in animal-related diseases for the department's Disease Control and Environmental Epidemiology Division, said, "Plague is a disease seen every year among rodent populations in rural areas of Colorado, including the Front Range. It is unusual to find plague in the center of an urban area although it has happened before." In Colorado, plague-infected animals are most likely found in the foothills and mountains, he added. According to Pape, "Plague bacteria are maintained in various species of rodents and rabbits and transmitted by fleas. When an infected rodent becomes sick and dies, its fleas can carry the infection to other warm-blooded animals, including humans. People also can be exposed through direct contact with infected rodents, rabbits and cats. "The risk of Denver residents contracting plague is extremely low," said Denver Public Health Director Dr. Chris Urbina. "We want people to be aware of what to look for and take a few simple precautions to further reduce that risk." He indicated that Denver Health, the Colorado Department of Public Health and Environment and Denver Environmental Health are working together to investigate the case and to determine the extent of the die-off in the area. (Plague is listed in Category A on the CDC list of Critical Biological Agents)* Non-suspect case

TULAREMIA, OVINE (Idaho): 28 Apr 2007, In the sagebrush desert near the intersection of Lincoln, Minidoka and Blaine counties in Idaho, grazing sheep don't pay much attention to county lines. So officials at the Idaho State Department of Agriculture aren't sure exactly where a flock of sheep was bitten by ticks carrying a bacterial infection earlier this month. About 300 sheep were infected with tularemia, and 10 lambs have died, the department reported

Friday. "That flock has been treated," said John Chatburn, deputy administrator with the department, declining to identify the sheep producer. "The Idaho Sheep Commission and the Idaho Wool Growers Association have notified the sheep producers in that area, and given them the information on the preventive measures they need to take to treat their sheep," he said. "The Department of Agriculture has notified the veterinarians in the state that we have had a case of tularemia, and to be on the lookout for it." Tularemia rarely has been seen in Idaho in the past decade, with 3 cases of human infection reported in the state during that time. The disease is commonly carried by ticks, which bite their hosts and transmit the infection. Without antibiotics, the infection can be fatal. The Department of Agriculture is not sure why there are more ticks this year than in previous years, but speculates that weather may be responsible. "A number of the livestock producers in that area have reported higher-than-usual concentrations of ticks," Chatburn said. "That would be probably due to environmental conditions. Ticks tend to thrive in warm, dry regions, a description southern Idaho fits after its mild winter." (Tularemia is listed in Category A on the CDC list of Critical Biological Agents)* Non-suspect case

INTERNATIONAL DISEASE REPORTS:

ARENAVIRUS, ORGAN TRANSPLANTS (Australia): 23 Apr 2007, Scientists in the Greene Infectious Disease Laboratory of Columbia University Mailman School of Public Health and colleagues in the Victoria Infectious Diseases Reference Laboratory in Melbourne, Australia and 454 Life Sciences have discovered a new virus that was responsible for the deaths of 3 transplant recipients who received organs from a single donor in Victoria, Australia. The previously unknown virus, which is related to lymphocytic choriomeningitis virus (LCMV), was found using rapid sequencing technology established by 454 Life Sciences and bioinformatics algorithms developed in the Greene Laboratory with support from the National Institute of Allergy and Infectious Diseases. Lymphocytic choriomeningitis virus (LCMV) is the type species of the genus Arenavirus of the Arenaviridae family of RNA viruses. The reservoir hosts of almost all arenaviruses are rodents. Known strains of LCMV have been implicated in a small number of cases of disease transmission by organ transplantation, however, the newly discovered virus is sufficiently different that it could not be detected using existing screening methods. Knowledge of the genetic sequence of this virus will enable improvements in screening that will enhance the safety of transplantation. (Arenaviruses are listed in Category A on the CDC list of Critical Biological Agents)* Non-suspect case

CHOLERA (Kenya): 24 Apr 2007, Health workers have been dispatched to a village in Turkana South following a cholera outbreak that the International Committee of the Red Cross (ICRC) says has killed 10 people. But speaking in Nakuru, the Rift Valley provincial medical chief, Dr Simon Kibias, said only 3 deaths had been confirmed. An ICRC official based in Turkwel, who preferred to remain anonymous, said the outbreak had claimed 10 lives in the past week. "The victims succumbed after severe bouts of diarrhea and vomiting. Villagers have told us that they have buried 10 bodies and taken dozens others infected to hospital," said the official. Health workers at Nakwamoru Catholic Mission Hospital said they were treating 20 cholera patients. The village is 70 km. from Marich, in West Pokot District, where the disease recently killed 11 people. Villagers in West Pokot and Turkana districts share the Muruny River, whose water was suspected to be the cause of the outbreak. Large populations from the 2 districts have no access to clean water. Following the West Pokot outbreak, health authorities ordered the closure of eating-places and warned residents to stop using the river. But residents have to walk a long distance to the few boreholes available. (Water safety threats are listed in Category B on the CDC list of Critical Biological Agents)* Non-suspect case

ANTHRAX, HUMAN, LIVESTOCK (Mongolia): 25 Apr 2007, According to local media, 4 cases of human anthrax were found recently in Mongolia's Arhangay Aymag and Hovd Aymag, which border China. The patients have been isolated in a hospital for treatment and their conditions have somewhat improved. In addition, anthrax occurred in the livestock of a herding family in Tomorbulag Soum of Hovsgol Aymag. In response, the county head imposed a quarantine in the affected area on 14 Apr 2007 and adopted disinfection measures. (Anthrax is listed in Category A on the CDC list of Critical Biological Agents)* Non-suspect case

CHOLERA (India): 25 April 2007, The water-borne disease that has claimed 2 lives and left more than 1500 people ill in the Bally municipality area of Howrah over the past 12 days has been diagnosed as cholera. Samples collected from the patients admitted to different hospitals in Howrah were examined at the School of Tropical Medicine and all the 11 samples tested positive for cholera. The sample of drinking water supplied by the Bally municipality was also found to be contaminated. According to reports, the drinking water of the area has fecal contamination and is not fit for consumption. (Water safety threats are listed in Category B on the CDC list of Critical Biological Agents)* Non-suspect case

TYPHOID FEVER (Fiji): 26 Apr 2007, The number of confirmed typhoid cases in Fiji has now reached 100 and thousands more are at risk. The outbreak, which is blamed on contaminated water caused by heavy rains and flooding, has claimed 2 lives so far. The director of public health, Dr Josaia Samuela, says officials have confirmed more cases this week. "For the northern division we have 95 cases up from the initial 77, the central division has not reported any new cases, but for the western division we had 5 new cases reported within the past one or 2 weeks." The Health Ministry is advising the public to refrain from drinking yaqona in the wake of typhoid reports. A major cause for the spread of typhoid is drinking contaminated water and eating contaminated food or poor hygiene. Acting director Public Health, Dr Josaia Samuela, said there was no scientific proof of the effects of yaqona on the disease but there were risks. "Typhoid is spread through unhygienic practices through food and water, sanitation, and surroundings. Yaqona drinking involves people mixing the drink, who could be carrying the bacteria and it could spread," Dr Samuela said. (Water safety threats are listed in Category B on the CDC list of Critical Biological Agents)* Non-suspect case

AVIAN INFLUENZA-RELATED REPORTS

WHO update: The WHO-confirmed global total of human cases of H5N1 avian influenza virus infection as of 11 April 2007 stands at 291, of which 172 have been fatal.

*Cases and outbreaks will be cited for suspect level with regards to suspicion of BT threat. Therefore, cases and outbreaks will be categorized as "Determined BT", "Suspect" or "Non-suspect".

NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

Questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

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